

ABSTRACT

The object of the present invention is to provide an as-grown single crystal of calcium fluoride having a large diameter and small birefringence. The as-grown single crystal of calcium fluoride according to the present invention is obtained by a single crystal pulling method (Czochralski method), has a straight barrel part diameter of 17 cm or more, preferably has a straight barrel part length of 50 mm or more, and has a birefringence of not more than 3 nm/cm, preferably 0.1 to 2.0 nm/cm.